



USTDA

U.S. TRADE AND DEVELOPMENT AGENCY

Renewable Power Generation

Linking U.S. Businesses to
Global Infrastructure Opportunities

www.ustda.gov

The U.S. Trade and Development Agency helps companies create U.S. jobs through the export of U.S. goods and services for priority development projects in emerging economies. USTDA links U.S. businesses to export opportunities by funding project planning activities, pilot projects, and reverse trade missions while creating sustainable infrastructure and economic growth in partner countries.

USTDA Programs

USTDA promotes economic growth in emerging economies by facilitating the participation of U.S. businesses in the planning and execution of priority development projects in host countries. The Agency's objectives are to help build the infrastructure for trade, match U.S. technological expertise with overseas development needs, and help create lasting business partnerships between the United States and emerging economies.

USTDA advances these objectives through its two key programs, the International Business Partnership Program and the Project Development Program.

In support of the National Export Initiative, USTDA launched the International Business Partnership Program (IBPP) to connect foreign project sponsors with U.S. manufacturers and service providers in order to open new export markets and identify commercial opportunities for U.S. companies. USTDA's reverse trade missions – the mainstay of the IBPP – bring foreign decision-makers to the United States to observe the design, manufacture and operation of U.S. products and services that can help them achieve their development goals. These visits also include meetings with financial institutions to introduce financing options, as well as technical and regulatory bodies that can assist with strengthening the project sponsor's technical capacity.

Through feasibility studies, technical assistance and pilot projects, USTDA's Project Development Program helps overseas project sponsors identify technological solutions and various sources of financing for priority infrastructure projects.

Overview of the Sector

Renewable energy development in emerging markets is a strategic priority for USTDA. The agency has been working with U.S. private sector and emerging market partners to identify and support activities related to the diversification of energy sources and the development of clean, renewable, and alternative fuels. USTDA also focuses on deploying commercially viable U.S. technologies that promote energy efficiency and utilize renewable resources to produce electricity. USTDA activities have supported the development of solar, geothermal, wind, hydropower, fuel cell, biofuel, and biomass energy sources.



USTDA's grant, to partially fund a feasibility study on a geothermal power plant in Turkey, has led to more than \$42.8 million in U.S. exports.



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Germencik Geothermal Plant in Turkey

Based on the results of a USTDA-funded feasibility study, the largest privately owned geothermal facility in Turkey became operational in May 2009. The 47.5 MW plant was built in the Aydin-Germencik geothermal field by the Turkish company, Gurmat Energy Investment and Trade Company. Over \$42.8 million of U.S. goods and services were utilized during the construction of the energy facility. The Germencik Geothermal plant is providing Turkey with an important renewable energy source to further the country's economic growth.

Clean Energy for Telecom Towers Pilot Project in India

Idea Cellular is committed to reducing its environmental impact and carbon footprint in India through the use of alternative fuel sources at its telecommunication tower sites. USTDA is partially funding a feasibility study and pilot project, which is cost shared by ICF Incorporated (Fairfax, VA), to examine the deployment of solar hybrid methanol based fuel cell systems that would provide continuous and uninterruptible power to telecom towers in India. The hybrid systems would replace stationary diesel engines using 2.5 kW and 5.0 kW fuel cell units.

University of Dodoma 55 MW Photovoltaic (PV) Solar Project in Tanzania

Under the U.S.-Africa Clean Energy Finance Initiative, USTDA is partially funding a feasibility study, which is cost shared with U.S. energy developer Hecate Energy (Nashville, TN), for the University of Dodoma in Tanzania. The project evaluates cost-effective solar photovoltaic solutions that can replace existing diesel generation and provide dedicated power to the University's Health Sciences Diagnostic Center and the surrounding community. The project will offer economic benefits for the University, diversify Tanzania's energy mix, lower fossil fuel consumption, and reduce greenhouse gas emissions.

20MW Hybrid Solar and Wind Park in Colombia

In efforts to diversify its energy generation portfolio and increase renewable energy, Colombian utility Celsia is seeking to develop a 20 MW hybrid solar and wind park in the Colombian department of Atlántico. USTDA is funding a feasibility study for this grid-connected project which will contribute to the improvement of Colombia's energy infrastructure by diversifying away from hydroelectric power and carbon-intensive coal-fired plants. The wind and solar assessments conducted in the study will determine the optimal balance of wind and solar power generation.



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